

29. *TRINGA ALPINA*, Linn.

Pelidna alpina, Sharpe, Cat. B. Brit. Mus. xxiv. p. 602 (1896).

A Dunlin was obtained at Ras Sophia, Red Sea, on the 28th of December, 1895.

30. *DEMIEGRETTA GULARIS* (Bosc).

This little white Egret was common everywhere; a pair were shot at Berenice.

31. *SULA FIBER*, Linn.; Heuglin, Orn. Nordost-Afr. iv. p. 1483, & Appendix.

An immature Booby, caught on the dhow, has the white breast and belly of the adult indistinctly showing through the sooty-brown plumage of youth.

XVIII.—*On the Birds of the Philippine Islands*.—Part IX.*
The Islands of Samar and Leite. By W. R. OGILVIE
 GRANT. *With Field-Notes by JOHN WHITEHEAD.*

(Plates V. & VI.)

ABOUT the middle of May, 1896, Mr. John Whitehead once more left Manila for the island of Samar, to make another collection in place of the one which had been lost off Singapore. There is no really high ground in Samar, and nowhere do the hills attain a greater altitude than about 1500 feet above sea-level. The greater part of the island is covered with a dense and lofty forest, many of the trees being over 240 feet high. Under these circumstances collecting was often a matter of difficulty, for birds, especially large ones, some 80 yards overhead are hardly to be brought down with a charge of shot from any ordinary gun. The climate is hot and damp, and, as might be expected, the rainfall unusually heavy, while the mud, for which the island is

* For Part I. see Ibis, 1894, pp. 406-411; Part II. *ibid.* pp. 501-522; Part III. Ibis, 1895, pp. 106-117; Part IV. *ibid.* pp. 249-267; Part V. *ibid.* pp. 433-472; Part VI. Ibis, 1896, pp. 101-128; Part VII. *ibid.* pp. 457-477; Part VIII. *ibid.* pp. 525-565.

almost proverbial, renders locomotion most disagreeable. With very few exceptions, the present collection from Samar contains all the more important birds previously met with, but a little Owl (*Scops* sp.), the lovely Blue Flycatcher (*Cyanomyias helenæ*), and the Flower-pecker (*Prionochilus olivaceus*) were not again seen. There were also a number of less important forms from the higher ground which were not procured on the second expedition, such as *Ninox philippensis*, *Corone philippina*, *Zeocephus rufus*, *Megalurus ruficeps*, *Copsychus mindanensis*, *Macropteryx comata*, *Chalcococcyx xanthorhynchus*, *Chalcophaps indicus*, and *Amaurornis olivaceus*; while from Calbega, on the west coast, *Elanus hypoleucus*, *Cinnyris jugularis*, *Calornis panayensis*, *Pelargopsis gigantea*, *Numenius arquatus*, *Limosa egocephala*, *Scolopax megala*, *Phoyx manillensis*, *Butorides javanica*, *Anas luzonica*, and *Dendrocygna arcuata* were among the birds lost. Of all these, the little Owl (*Scops* sp.) is the most serious loss, for it appears to have belonged to an undescribed species.

On the other hand, several remarkable species not included in the first collection were added to the list, among these may be specially mentioned the Great Forest-Eagle (*Pitheophaga jefferyi*). The discovery of this new and splendid bird of prey was well worth the second expedition to Samar, and to some extent makes up for the loss of the previous collection.

On the 25th of July it was determined to change the collecting-ground and, if possible, to reach the neighbouring island of Biliaran in a large open boat; but the wind, at this season of the year from the south-west, was blowing a gale, and the boat, failing to reach her destination, shaped her course for the north of Leite, which is much nearer and more sheltered. Mr. Whitehead arrived there on the night of the 27th, and moved inland to a small village near the mountains. Here porters were obtained, and a camp was formed at a spot about 1000 feet above the sea. The mountains in this island range from 5000 to 7000 feet; but no collecting could be done in the really high ground, for the paths and

roads were at this season impossible for porters, and, to make matters worse, the birds were mostly in full moult. Having spent three weeks in Leite, Mr. Whitehead thought it advisable to return to Manila, and after a rough voyage arrived there safely on the 8th of September. On landing he found that the Indians had risen, and the whole neighbourhood of Manila was in a state of active rebellion. Martial law had been proclaimed, and as it was impossible to obtain a permit to leave the town with firearms, a couple of months were spent waiting for matters to quiet down, but in vain. To remain in Manila was obviously a waste of time, so in November it was determined to return home, *via* America. Mr. Whitehead arrived in England at the end of last December, after an absence of more than three years.

That the bird-life in Samar and Leite should prove almost identical is scarcely surprising, for the islands lie close together, being only separated at one part by a very narrow channel some few hundred yards wide. It has not therefore been thought necessary to divide this paper into two parts, but in every case care has been taken to mention the island or islands where each species was obtained.

The present collections contain many birds of particular interest, and besides the wonderful Forest-Eagle mentioned above, there are several other new species, such as the tiny Falcon (*Microhierax meridionalis*), the Pigmy Babbler (*Zosterornis pygmaeus*), and two Flower-creepers (*Rhabdornis minor* and *R. inornatus*).

A number of nests and eggs have been collected in the various islands of the Philippine group visited by Mr. Whitehead; and as many of the eggs were hitherto unknown, we hope at some future time to give an account of them, with figures of the more important.

It is greatly to be regretted that the insurrection in the Philippines has for the present rendered it impossible for Mr. Whitehead to continue his explorations in the highlands; but constant exposure to a trying climate and insufficient food had begun to tell on his health, and it was high time that he should have a rest from his labours. It is, however, a

matter for congratulation that he is now rapidly regaining his strength.

1. *ASTUR TRIVIRGATUS* (Temm.); Sharpe, Cat. B. Brit. Mus. i. p. 105 (1874); Steere, List of Birds & Mamm. Philippines, p. 7 (1890); Bourns & Worcester, Occ. Pap. Minnesota Acad. Sci. i. no. 1, p. 32 (1894).

The Crested Goshawk is evidently rather a rare bird in the Philippines, as this is the first time specimens have been received from Mr. Whitehead. Two males were obtained in Samar, both belonging to the smaller race met with in Southern India, Ceylon, and Sumatra. It was from the last island that Temminck described his *Falco trivirgatus*.

2. *ACCIPITER MANILLENSIS*, Meyen; Grant, Ibis, 1895, p. 438; 1896, pp. 108, 109.

A beautiful little male of the Manila Sparrow-Hawk was obtained in Leite. It differs somewhat from the most adult males in the British Museum series, and is evidently a very old bird. The entire chest and breast are uniform dull light red, only a few hidden feathers showing traces of the dark transverse bands characteristic of younger examples; the dark shaft-stripes, which usually form a well-marked band down the middle of the throat, are much reduced in width, *as in males of Accipiter gularis*. It is clear, however, that the Leite bird does not belong to the latter species; the shape of the wing, with the fourth primary quill only slightly longer than the fifth, the small dimensions, and the colour of the chest and breast being all characteristic of *A. manillensis*. Wing (in moult) 5·9 inches, tail 4·2, tarsus 1·95.

3. *SPILORNIS HOLOSPILUS* (Vigors); Grant, Ibis, 1896, p. 527.

Two fully adult females of this Serpent-Eagle have the plumage of the underparts of a deep rich chestnut, and bear out the remarks already made when writing of *S. panayensis*, Steere, from Negros.

[This Serpent-Eagle is a common bird in the Philippines, and frequents the borders of forests. It is easily approached when sitting gorged on the end of a branch.—J. W.]

4. *PERNIS CRISTATUS*, Cuv. ; Blanford, Fauna Brit. Ind., Birds, iii. p. 406 (1895).

Pernis ptilonorhynchus, Grant, Ibis, 1894, p. 503 ; 1895, pp. 108, 251.

The proper name for the Honey-Buzzard found in the Philippines is comparatively a matter of secondary importance. As Mr. Blanford has shown, *cristatus* of Cuvier has priority over Temminck's name *ptilonorhynchus*, both based on birds from Sumatra. But the main question to be settled is this:—Are the birds from India commonly called *P. ptilonorhynchus* really of the same species as those found in Sumatra, Java, &c., and the Philippines? The Samar collection contains a bird in very much more adult plumage than those previously received from Luzon, and though in moult, the longest crest-feather measures nearly 3 inches. In the young birds from Luzon the crest, though shorter, is well developed.

Dr. Sharpe [*cf.* Cat. B. Brit. Mus. i. p. 349 (1874)] mentions that a bird from Java in the Leiden Museum has a black crest 3·7 inches long. A specimen from Sumatra, in the Tweeddale collection, has the longest crest-feathers broken, but when complete they no doubt measured 3 inches or more. We have but a small number of birds from these islands for comparison, and none are really mature (?) ; but the British Museum series contains many fully adult Honey-Buzzards from India, and a still larger number of younger examples in all stages. Though the feathers on the nape of adult Indian birds are somewhat lengthened and pointed, and generally accentuated by their blacker colour, *none are conspicuously longer than the rest*. Consequently these birds cannot appear crested when alive. Dr. H. O. Forbes, however, informs us that all the Honey-Buzzards he saw and collected in Sumatra possessed a long crest, which stood out conspicuously when the birds were at rest. Again, in all the long-crested birds from the Philippines the chest-feathers have wide black club-shaped shaft-stripes, most strongly marked in older examples, in which they contrast strongly with the barred plumage of the belly and flanks.

In immature birds from the Philippines the shaft-stripes are confined to the chest, the rest of the underparts being uniform whitish buff; while in Indian birds of the same age *all* the underparts have much narrower black shaft-stripes. The plumage of the underparts in the most adult Philippine bird most nearly resembles that of *Pernis tweed-dalii*. It seems evident that the intricate changes of plumage in these birds require more careful study, but the material available is at present insufficient.

5. PITHECOPHAGA JEFFERYI. (Plate V.)

Pithecophaga jefferyi, Grant, Bull. B. O. C. no. xl. p. xvii (1896).

The discovery of this mighty bird of prey is without doubt the most remarkable of Mr. Whitehead's achievements in the Philippine Islands. That so large a Raptor should have remained unknown till the present time only shows how easily these great Forest-Eagles may be overlooked. As an instance of this, it is worth mentioning that during the years Mr. Salvin spent collecting birds in Central America he only once saw a Harpy Eagle. The fact is that in the dense and lofty forests where these birds make their home it is almost impossible to see them, and still more difficult to obtain a shot.

Of the present species the only example obtained was a male in moult, with the majority of the quills of both wings and tail much worn and broken at the tips. The new quill-feathers of these parts, though not quite fully grown, are very important evidence, since they not only show the true shape and colour of the perfect plumage, but indicate that the bird is fully adult.

The type of the present description was the male of a pair which had their abode in the forest opposite Mr. Whitehead's camp, in the island of Samar, and were daily seen on the wing. As already mentioned, there are no high mountains on the island, which is covered with a dense and extremely lofty forest-growth, many of the trees attaining the gigantic stature of 240 feet or more, as was ascertained by the actual



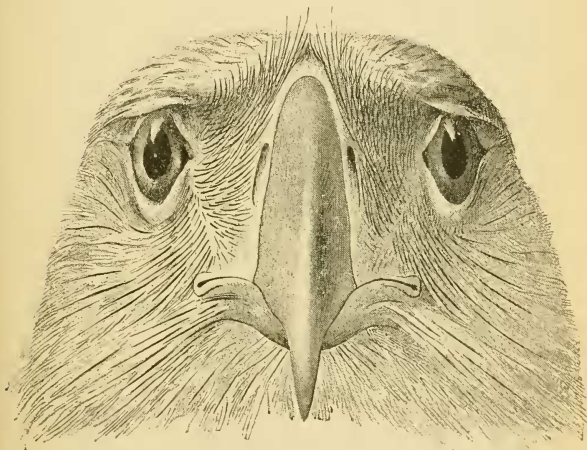
J. G. Keulemans del. & col.

Harper's 73

PITHEOPHAPS JEFFERSONI

measurement of fallen trunks. For many days these birds were watched with longing eyes, for their great size on the wing and strange wailing cry seemed to indicate something new and most desirable. At last one of Mr. Whitehead's collectors succeeded in shooting the male, which he brought into camp. He had been fortunate enough to see the bird perch on one of the highest trees, and obtained a chance of securing this much coveted prize. A well-directed buck-shot entered the neck, and though it failed to bring the

Fig. 1.



Pitheophaga jefferyi. Front view of head: $\frac{9}{10}$ natural size.

great Eagle down, rendered its escape almost impossible. To give some idea of the height of the trees, we may add that this man subsequently fired several times at the wounded bird with number 4 shot, but when it was examined not one of these pellets had penetrated the skin! The Eagle was eventually secured by the native, who climbed the tree and unloosed its powerful claws, which were still clinging to the branches. Mr. Whitehead says that it weighed between

Fig. 2.



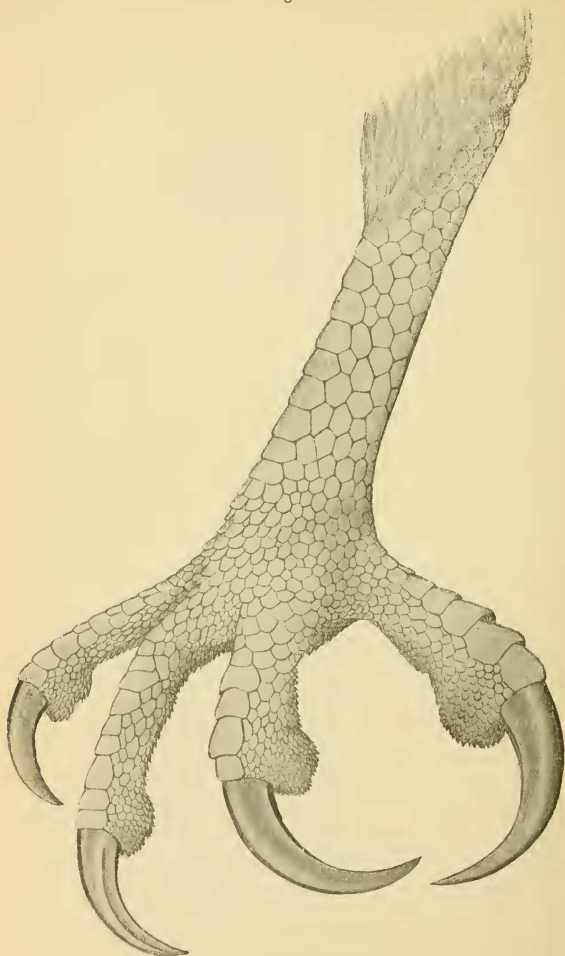
Pithecophaga jefferyi. Side view of head: $\frac{9}{16}$ natural size.

16 and 20 lbs., and that, in his then enfeebled state of health, it was as much as he could do to hold the bird out at arm's length.

The Plate by Mr. Keulemans, though an excellent representation of the bird, is necessarily much reduced, being only one-sixth of the natural size, so that the peculiar characters of the bill and feet are not clearly enough shown. These parts have, however, been very carefully drawn by Mr. H. Grönvold, and the extraordinary shape and size of the bill are accurately represented by the front and side views of the head $\frac{9}{10}$ of the natural size (see figs. 1 and 2). The outline of the culmen describes the perfect segment of a circle, the centre of which is the base of the cere where it joins the cutting-edge of the upper mandible. This may be seen by placing a pair of compasses on the figure representing the side view of the head. The depth of the bill is greater than that of any known bird of prey, except Pallas's Sea-Eagle (*Haliaëtus pelagicus*), in which it is sometimes a trifle greater, while such extreme narrowness, compared with the depth, is quite unique in birds of this order. It is only among some Parrots, such as the Black Cockatoo (*Microglossus aterrimus*), that we find a bill approaching this type, but in none of these is it laterally compressed to the same extent. The high vaulted nasal opening, set almost vertically, is another peculiar character. The naked tarsi and feet approach those of the Harpy Eagle (*Thrasaëtes harpyia*) in size and strength, and the scaling of the tarsi is remarkably similar, as is well shown in figs. 3 & 4. Strange as it may seem, we have little doubt that the Harpy is the nearest known ally of the present species.

It is to be regretted that the bones of the body were not preserved, as it would have been very interesting and important to compare these with the skeleton of the Harpy Eagle or other allied species. An attempt was made by means of the X-rays to photograph the skull still left in the skin; but this is unfortunately stuffed with hemp, which proves to be almost impervious. The bones of the bill and the shape of the skull and mandible are, however, clearly

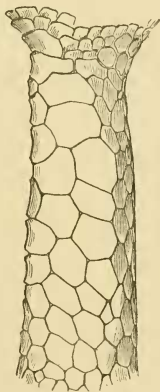
Fig. 3.

*Pithecophaga jefferyi*. Right metatarsus: $\frac{3}{4}$ natural size.

shown in the photograph, and it may be plainly seen that the nasal cavities are divided one from another by a bony septum. The skull is enormous, very much larger than that of the Harpy, with which it has been compared. On some future occasion we hope to give exact details, for, when the opaque material which fills the skull has been removed, there is no reason why the Röntgen process should not prove entirely successful.

According to the natives of Samar, this Forest-Eagle is well-known to them, and preys chiefly on the Green Monkeys

Fig. 4.



Pithecophaga jefferyi. Hinder aspect of right metatarsus: $\frac{3}{4}$ natural size.

(*Macacus cynomolgus*), though it not infrequently visits the villages and carries off domestic poultry. The worn and broken ends of the quills of both wings and tail no doubt bear testimony to many a savage struggle amongst the branches.

Though this Eagle was not seen during Mr. Whitehead's short stay in the island of Leite, its cry was frequently heard, and it no doubt occurs there. It will probably also be met with in other islands of the Philippine group, for

Mr. Whitehead was informed by a native that a specimen had been obtained in Luzon.

Pithecophaga jefferyi, perhaps the most remarkable bird which has been discovered in the Philippines, has been named at our friend's wish in honour of his father, Mr. Jeffery Whitehead.

6. *MICROHIERAX MERIDIONALIS*, sp. n.

All the examples of *Microhierax* hitherto recorded from the Philippine Islands have been identified with *M. erythrogenys* (Vigors). The type of this species, which was described from the island of Luzon, is preserved in the British Museum. By referring to the 'Ibis,' 1894, p. 407, it will be seen that we have already pointed out a well-marked sexual distinction in the plumage of the Luzon Pigmy Falcon, which had apparently been overlooked in previous descriptions of *M. erythrogenys*. The males of this species have the inner webs of the primary-quills barred with white, while in the females these parts are uniform black.

The Samar collection contains a male and two females of a *Microhierax*, which at the first glance seemed different from typical *M. erythrogenys*, both on account of their larger size and the absence of the white wing-bars in the male. From a more careful examination of these three specimens and the series in the British Museum, it seems certain that two species occur in the Philippines, but have been confounded with one another. The Luzon birds seem to be quite distinct from the larger species found in the more southern islands of Samar, Cebu, and Mindanao, for which the name of *Microhierax meridionalis* is proposed.

The new species may be characterized as follows:—

Adult male. Similar to the male of *M. erythrogenys*, but considerably larger; the under wing-coverts and inner webs of the primaries uniform black; and the belly, vent, and under tail-coverts washed with pale fulvous. Total length 6·5 inches, culmen (from cere to tip) 0·51, wing 4·45, tail 2·6, tarsus 0·85.

The type of the male is from Zamboanga, Southern Mindanao.

Microhierax erythrogenys (Vigors).

Luzon.

	Wing. in.	Locality.	Collector.		Wing. in.	Locality.	Collector.
Adult ♀	4.25	Mount Arayat.	J. Whitehead.	Adult ♂	4.05	Mount Arayat.	J. Whitehead.
"	4.25	"	"	"	4.02	Lepanto.	"
"	4.25	Monte Alban.	A. H. Everett.	"	4.05	Laguna de Bai.	A. H. Everett.
"	4.35	Laguna de Bai.	"	" [♀]*	4.0	Luzon.	A. B. Meyer.
"	4.35	Luzon.	J. B. Steere.				
"	4.45	"	A. B. Meyer.				
" [♂]*	3.9 (in full moult).	"	J. B. Steere.				

* No doubt the sex has been wrongly determined.

Microhierax meridioualis, sp. n.

	Wing. in.	Locality.	Collector.		Wing. in.	Locality.	Collector.
Adult ♀	4.8	Cebu.	A. H. Everett.	Adult ♂	4.3	Samar.	J. Whitehead.
"	4.6	Samar.	J. Whitehead.	" (type)	4.45	Zamboanga, Mindanao.	A. H. Everett.
" (type)	4.6	"	"	"	4.35	Ayala, Mindanao.	J. B. Steere.
"	4.6	Zamboanga, Mindanao.	A. H. Everett.				

Inner webs of primaries black.

Inner webs of primaries black.

Inner webs of primaries barred with white.

Adult female. Similar to the male, but larger. Total length 7·2 inches, culmen (from cere to tip) 0·5, wing 4·6, tail 2·75, tarsus 0·87.

The type of the female is from the island of Samar.

The preceding table (p. 221) of comparative measurements is a record of the specimens examined, in which the sex and exact locality are mentioned.

[A pair of the Samar Pigmy Falcon were observed nesting in the charred trunk of a dead tree left standing on a native clearing. They were engaged in rearing their young, whose cries could be heard, but, owing to the rotten condition of the trunk and the great height of the nest from the ground, it was found impossible to get at them.—J. W.]

7. *POLIOAËTUS ICHTHYAËTUS* (Horsf.); Sharpe, Cat. B. Brit. Mus. i. p. 452 (1874); Steere, List Birds & Mamm. Philippines, p. 8 (1890); Bourns & Worcester, Occ. Pap. Minnesota Acad. Sci. i. no. 1, p. 33 (1894).

There is a fine adult pair of the large Grey-headed Fishing-Eagle from the island of Samar. The species has previously been recorded from Mindoro, Calamianes, Mindanao, and Basilan.

[This Eagle is generally found frequenting the coast and salt-water lagoons; but the pair obtained in Samar were met with in a mountainous district miles from the coast, living on the fish caught in the clear waters of a river.—J. W.]

8. *NINOX PHILIPPENSIS*, Bonap.; Grant, Ibis, 1896, p. 531.

An adult male from Leite agrees perfectly with typical examples from Luzon, and differs from birds from Negros and the other central islands. Full particulars will be found in our previous paper, quoted above.

[Iris bright straw; bill greenish yellow; feet straw-yellow.—J. W.]

9. *ORIOLOUS CHINENSIS*, Linn.; Grant, Ibis, 1896, p. 532.
An adult male of the Chinese Oriole from Samar.

10. *ORIOLOUS SAMARENSIS*, Steere, List of Birds & Mamm. Philippines, p. 17 (1890); Bourns & Worcester, Occ. Pap. Minnesota Acad. Sci. i. no. 1, p. 54 (1894); Grant, Ibis, 1896, p. 533.

There is a fine adult pair of the striped Samar Oriole from that island, and a less mature male from Leite. The latter undoubtedly belongs to this species, which is referred to in our previous paper on the birds of Negros, quoted above.

[*Adult*. Iris red, bill pinkish brown; feet grey-black. *Immature*. Iris grey; bill dull brownish pink; feet dusky grey.

This species, according to my experience, was extremely rare in both islands, the first Samar collection, which was lost, only containing four specimens.—J. W.]

11. *DICRURUS STRIATUS*, Tweedd. P. Z. S. 1877, p. 545; Steere, List Birds & Mamm. Philippines, p. 15 (1890).

Mr. Whitehead obtained the Striped Drongo on both Samar and Leite. It may be worth calling attention to the outermost flank-feathers, which are pale grey in younger examples, and nearly pure white in the fully adult. This rather marked character appears to have escaped Lord Tweeddale's notice, for he does not mention it in the original description.

This species is also known to occur in Panaon, Nipah, Mindanao, and Basilan.

[Iris dark brown; bill and feet black.—J. W.]

12. *LALAGE MINOR* (Steere); Bourns & Worcester, Occ. Pap. Minnesota Acad. Sci. i. no. 1, p. 41 (1894).

Pseudolalage minor, Steere, List of Birds & Mamm. Philippines, p. 15 (1890).

This rare Cuckoo-Shrike, which was originally described by Prof. Steere from examples from Mindanao, and subsequently recorded by Messrs. Bourns and Worcester from Samar, has now been found in Leite. Mr. Whitehead obtained two males and one female, which agree perfectly with Steere's types.

13. *ARTAMIDES MINDANENSIS*, Steere, List Birds & Mamm. Philippines, p. 14 (1890); Grant, Ibis, 1896, pp. 536, 537.

Of the Mindanao Cuckoo-Shrike I have received a pair: a female from Samar and a male from Leite, the latter island being a new locality. The relations of this species are discussed in my previous paper, cited above.

[Iris and bill black; feet greyish black.—J. W.]

14. *PERICROCOTUS LEYTENSIS*, Steere, List Birds & Mamm. Philippines, p. 15 (1890); Bourns & Worcester, Occ. Pap. Minnesota Acad. Sci. i. no. 1, p. 41 (1894).

There are several examples of the Leite Minivet from that island, as well as from Samar, whence it had already been procured. Prof. Steere's type, an adult male from Leite, agrees in every particular with a similar bird shot by Mr. Whitehead in Samar; both have six or seven of the inner secondary-quills ornamented on the outer webs with orange-red subterminal drops. But this character, as we have already shown, is variable, and cannot be altogether relied on.

15. *HYPOTHYMIS AZUREA* (Bodd.); Grant, Ibis, 1896, p. 540.

The Black-naped Flycatcher is also represented from both collections.

It may here be noted that the type of *Cyanomyias caelestis* ('Tweedd.) differs considerably from the two examples in the Steere collection obtained respectively at Samar and Basilan. In both these, the top of the head, long feathers of the occiput, and the mantle are cobalt, with a slight greenish tinge; while in the type these parts are strongly washed with purple, and the throat and fore neck are much richer purple-blue. The birds from Samar and Basilan resemble one another in plumage; the former is marked male, the latter female. I do not question the specific identity of these three birds: that from Samar is no doubt an immature male, and if the female from Basilan is fully adult, which she has every appearance of being, the sexes differ one from another in the colour of the head, mantle, and throat. This is

probably correct, for in the allied *C. helenæ* Messrs. Bourns and Worcester point out a similar difference in the plumage of the female.

Mr. Whitehead obtained this bird in the first collection from Samar, which was lost.

16. *HYPOTHYMIS SAMARENSIS*, Steere, List Birds & Mamm. Philippines, p. 16 (1890).

The Blue-browed Flycatcher of Samar is represented from both islands; it has been well characterized by Prof. Steere, and is quite distinct from *H. superciliaris*, Sharpe, from Mindanao and Basilan. The male and female are alike in plumage. Mr. Whitehead considers that this bird belongs to the genus *Rhipidura*, and is not a *Hypothymis*, as Prof. Steere supposed. I think, however, that the present species is better placed in the genus *Hypothymis*. *Rhipidura* has the tail rounded, the outer feathers being much shorter than the middle pair, which are considerably longer than the wing; but in the bird before us the measurements of the wing and tail are exactly equal, and the outer tail-feathers are scarcely shorter than the middle pair; this is exactly what we find in *Hypothymis azurea*. The only reason I can see for not placing *H. samarensis* in *Hypothymis* is the strong bristles surrounding the upper and lower mandibles exceeding the bill in length.

[Iris and bill black, base of lower mandible whitish; feet brown, greyish blue at the joints of the scales.—J.W.]

17. *RHINOMYIAS RUFICAUDA* (Sharpe); Sharpe, Cat. B. Brit. Mus. iv. p. 368 (1879); Grant, Ibis, 1896, pp. 541, 542.

Setaria samarensis, Steere, List Birds & Mamm. Philippines, p. 16 (1890).

In the paper on the Negros birds, quoted above, it has been shown that *R. samarensis*, Steere, is synonymous with *R. ruficauda*. A key to the different species of *Rhinomyias*, and a list showing the range of each, is also given in the same paper. The Rufous-tailed Flycatcher is in both collections, this being the first time that it has been recorded from Leite.

[Iris and bill black; feet dull pinkish brown.—J. W.]

18. *MUSCICAPULA SAMARENSIS*, Bourns & Worcester, Occ. Pap. Minnesota Acad. Sci. i. no. 1, p. 26 (1894).

The Samar White-browed Flycatcher is described by Messrs. Bourns and Worcester as having the sexes alike, but a mistake has evidently been made in ascertaining the sex of the slate-coloured bird described as a female. Mr. Whitehead obtained two pairs of this species, and the females differ entirely from the males in the colour of the upper parts, which are rusty brown, while the strongly marked white eyebrow-stripes are practically absent. There cannot be the slightest doubt that the rufous-brown females are fully adult, for one was shot from a nest with four eggs, and that they belong to the same species as the slate-grey males is almost equally certain.

I observe that the type of *M. mindanensis*, Blasius (J. f. O. 1890, p. 147), a grey bird, is said to have been a female, but here probably a mistake has been made. There are two adult grey examples of this Flycatcher from the Steere collection, both of which are said to be males, and they agree perfectly with the description of the type.

The description of the female of *M. samarensis* is as follows:—Upper parts rusty brown, darkest on the crown, and shading into chestnut on the upper tail-coverts, the superciliary stripes of the male only represented by a white feather or two on the sides of the occiput; wings and tail dark brown, the exposed parts of the quills mostly chestnut; sides of the head and neck light rusty brown, palest round the eye, and forming a rather marked ring; underparts much like those of the male, but the indistinct grey pectoral zone is replaced by one tinged with rusty; thighs brownish buff, under tail-coverts buff. The type measures:—Total length 4·3 inches, culmen 0·55, wing 2·4, tail 1·45, tarsus 0·75.

A second female measures:—Total length 4·3 inches, culmen 0·59, wing 2·46, tail 1·48, tarsus 0·75.

In general appearance the female of *Muscicapula samarensis* bears a close resemblance to *Rhinomyias ruficauda*, the underparts being strangely alike in both. The latter species is, however, easily recognized by its much longer tail.

[Iris and bill black ; tarsus bluish white ; feet white.—
J. W.]

19. *CULICICAPA HELIANTHEA* (Wallace) ; Grant, Ibis, 1896,
p. 542.

This little Yellow-breasted Flycatcher is now recorded from
Leite for the first time. It is also known to occur in Luzon,
Negros, Panay, Palawan, and Celebes. It will probably be
found to inhabit the high ground of the southern islands of
the Philippine group.

20. *CRYPTOLOPHA OLIVACEA* (Moseley) ; Grant, Ibis, 1896,
p. 543.

An adult and a young male of the Olive Flycatcher-
Warbler from Samar, and an adult male from Leite ; the
latter locality is new.

The young bird has the crown entirely olive-green, and
the throat washed with pale yellow.

21. *POLIOLOPHUS UROSTICTUS* (Salvad.) ; Grant, Ibis, 1896,
p. 116.

Pycnonotus urostictus, Tweeddale, Trans. Zool. Soc. ix.
pl. xxxii. (1875).

Poliolephus basilanicus, Steere, List Birds & Mamm.
Philippines, p. 19 (1890).

Though two species of the Wattled Brown Bulbul are
recognized by Prof. Steere, there can be no doubt that
P. basilanicus is synonymous with *P. urostictus*. It is true
that the type of the male, a freshly moulted bird from
Basilan, has the upper parts of rather a brighter olive than
usual ; but the female type from the same island is identical
with specimens from Mindanao and other more northern
localities.

Mr. Whitehead writes that the naked skin round the eye
is of a pale lemon-yellow, and forms a conspicuous character
when the bird is alive. This yellow ring and the peculiar
black and white markings on the feathers of the lower back
are omitted in the figure given by Lord Tweeddale, and
quoted above ; but the former is well shown in the woodcut
given by Dr. Sharpe (Cat. B. Brit. Mus. vi. p. 63, 1881).

22. *PYCNONOTUS GOJAVIER* (Scop.) ; Grant, *Ibis*, 1895, p. 446.

The Yellow-vented Bulbul was met with on both islands.

23. *IOLE EVERETTI* (Tweedd.) ; Sharpe, *Cat. B. Brit. Mus.* vi. p. 57 (1881) ; Steere, *List Birds & Mamm. Philippines*, p. 19 (1890).

The type of Everett's Yellow Bulbul is a male from Northern Mindanao. The species has also been met with in the islands of Dinagat, Samar, and Leite, and examples from both the last-named islands are included in the present collection. As in all the birds of this genus, the adult male and female are similar in plumage.

[Iris lake-brown ; upper mandible black, lower dull slate-blue ; legs brownish pink.—J. W.]

24. *IRENA ELLÆ*, Steere, *List Birds & Mamm. Philippines*, p. 18 (1890) ; *id.* *Ibis*, 1891, p. 313, pl. viii.

There are examples of the Samar Fairy Blue-bird in both collections.

[Iris lake-red ; bill and feet black. When I arrived at Samar, in the middle of May, these birds were in splendid plumage, but most difficult to obtain, owing to their habit of frequenting the topmost branches of the highest trees, though their peculiar whistling note might be heard almost any day. In Leite, however, I found this species abundant at an elevation of about 1000 feet, frequenting even low growth ; but they were then in full moult and not worth collecting.—J. W.]

25. *ORTHOTOMUS SAMARENSIS*, Steere, *List Birds & Mamm. Philippines*, p. 20 (1890).

There is a small series of this beautiful Yellow-breasted Tailor-bird, hitherto only known from the male type obtained by Prof. Steere in Samar. The plumage of the female still remains unknown, for all the specimens in the present collections prove to be males. The amount of white on the throat varies considerably in different individuals—some, like the type, have the white patch confined to the chin ; in others it covers the greater part of the throat.

[Iris light brown; bill brownish black, mandible pinkish brown; legs yellowish flesh-colour. This bird has a sweet and powerful song, and in this respect it differs from the following species. It is very shy and difficult to obtain.—J. W.]

26. *ORTHOTOMUS FRONTALIS*, Sharpe; Sharpe, Cat. B. Brit. Mus. vii. p. 220 (1883); Steere, List Birds & Mamm. Philippines, p. 20 (1890).

The Chestnut-fronted Tailor-bird is represented in both collections.

[Iris light brown; bill black, lower mandible greyish pink; legs pinkish brown.—J. W.]

The following key to the species of *Orthotomus* found in the Philippines will, I hope, facilitate their identification:—

I. Crown and nape black.

A. Upper throat white, fore neck deep black; breast and rest of underparts bright yellow. *O. samarensis*.

B. Throat and fore neck mottled with black and white; breast greyish white, shading into olive-yellow on the sides and flanks. *O. nigriceps*.

II. Crown and nape dark grey.

C. Forehead grey like the crown; chin and throat black *O. cinereiceps*.

D. Forehead and feathers surrounding the eye rich chestnut *O. frontalis*.

III. Entire crown and forehead chestnut.

E. Tail chestnut, or chestnut margined with olive towards the base.

a. Underparts uniform whitish buff; back entirely grey. *O. ruficeps*.

b. Underparts grey, with white shaft-streaks.
 a'. Back grey *O. derbianus*.
 b'. Back green *O. chloronotus*.

F. Tail brownish, strongly margined with olive; upper back grey, shading into olive on the lower back and rump*; underparts white, only the chest-feathers being edged with grey *O. castaneiceps*.

* The amount of green varies in different individuals, as mentioned in my previous paper (Ibis, 1896, p. 549).

1. *Orthotomus samarensis*. Samar, Leite.
- *2. „ *nigriceps*. Northern Mindanao.
3. „ *cinereiceps*. Mindanao and Basilan.
4. „ *frontalis*. Samar, Leite, Dinagat, Bohol, Mindanao, and Basilan.
5. „ *ruficeps*. Calamianes, Palawan, Borneo, Sumatra, Malay Peninsula.
6. „ *derbianus*. South and Central Luzon.
7. „ *chloronotus*. North-east Luzon (only the type from Engaño known).
8. „ *castaneiceps*. Panay, Guimaras, Negros, and Masbate.

27. *CISTICOLA EXILIS* (Vig. & Horsf.) ; Bourns & Worcester, Occ. Pap. Minnesota Acad. Sci. i. no. 1, p. 40 (1894) ; Grant, Ibis, 1896, p. 117.

Two males of the Red-headed Fantail-Warbler from Samar.

28. *PTILOICICHLA MINUTA*, Bourns & Worcester, Occ. Pap. Minnesota Acad. Sci. i. no. 1, p. 24 (1894).

This small Fluffy-backed Babbler was met with on both islands, but in Samar it appeared to be extremely rare, only a young male being procured. In Leite, however, five specimens were added. As Messrs. Bourns and Worcester have shown, this species is extremely distinct from the birds found in Mindanao and Basilan. From the former locality I have only the adult male type of *P. mindanensis* for comparison ; indeed, so far as I know, this is the only specimen that has been procured on the island. From Basilan there are four examples, including the types of *P. basilanica*. The differences pointed out by Prof. Steere are extremely slight, and I very much doubt if the Mindanao bird is really separable ; it certainly has the back

* Only the type obtained by Mr. A. H. Everett at Butuan is known. That his bird is evidently not quite adult seems certain, and we should not be altogether surprised if it turned out to be merely a younger stage of plumage of *O. samarensis*.

more uniform and devoid of dark margins to the feathers, but taken altogether the differences are small and may be due to age. The type of *P. mindanensis* was procured at Ayala, Southern Mindanao.

[This bird is always found on the ground; when moving it does not hop like the Thrush-tribe, but has a must decided walk like the Starlings. Its note is a "chic, chic, chic"; it is most shy and very difficult to obtain. Iris dark brown, tip of upper mandible black, lower light grey; feet brown.—J. W.]

29. *MACRONUS MINDANENSIS*, Steere, List Birds & Mamm. Philippines, p. 17 (1890).

There are numerous examples of the Hairy-backed Babbler from both islands. It seems curious that the birds from Mindanao should resemble those from Samar and Leite, and differ from the Basilan species (*M. striaticeps*). Nevertheless this is the case. Prof. Steere describes the type of *M. mindanensis* as having the ground-colour of the head and nape "brown," but in reality it is deep black.

[Frequents the low growths in small parties, probably families of four or five in number. Iris yellowish white; upper mandible black, lower dull whitish; feet greyish brown.—J. W.]

Key to the Species of the Genus Macronus found in the Philippines.

- I. Whole crown of the head deep black, with white shaft-stripes.
 - a. Chest-feathers mostly rufous buff..... *M. mindanensis*.
 - b. Chest-feathers white, edged with grey *M. striaticeps*.
- II. Forehead with white shaft-stripes; crown brown, like the back; underparts nearly uniform pale buff..... *M. kettlewelli*.

Macronus mindanensis. Samar, Leite, Panaon, Dinagat, and Mindanao.

„ *striaticeps*. Basilan.

„ *kettlewelli*. Sulu, Tawi Tawi, and Bongao.

30. *ZOSTERORNIS NIGROCAPITATUS* (Steere).

Mixornis nigrocapitatus, Steere, List Birds & Mamm. Philippines, p. 17 (1890).

Prof. Steere originally described this bird as a *Mixornis*, but the structure of the nasal opening, as well as the shape of the wing, clearly show that it is a species of *Zosterornis*, most nearly allied to *Z. dennistouni*, Grant, from Luzon. Young birds have the top of the head brownish and the interscapular region darker than in the adult, and both these parts have well-defined whitish shaft-stripes; the colour of the chin and throat is also paler than in the adult, while the outer webs of the primary quills are pale sandy.

[The Black-headed Babbler is common in Samar and Leite, and frequents the higher branches of the undergrowth. Iris two-coloured, having an outer ring of red and an inner one of pale yellow; bill black; legs dull lead-blue.—J. W.]

31. *ZOSTERORNIS PYGMÆUS*. (Plate VI. fig. 1.)

Zosterornis pygmæus, Grant, Bull. B. O. C. no. xl. p. xviii (1896).

Mixornis plateni, Bourns & Worcester (*nec* Blasius), Occ. Pap. Minnesota Acad. Sci. i. no. 1, p. 58 (1894).

The Pigmy Babbler is apparently a scarce bird in both islands, only one specimen being obtained in Samar, though four were collected in Leite.

There can be no doubt that this is the species Messrs. Bourns and Worcester described as *Mixornis plateni*, Blasius; but the type came from Mindanao (*cf.* J. f. O. 1890, p. 145), and appears to be considerably larger and somewhat differently coloured.

[It frequents similar localities to *Z. nigrocapitatus*, and, as in that species, the colour of the eye is remarkable, being composed of two sharply-defined colours, an outer ring of vermilion and an inner one of pale yellow. Bill black at tip, base and nostrils slate-blue; feet slate-grey.—J. W.]

The members of the genus *Zosterornis* are confined to the Philippine Islands; the only species of true *Mixornis* found within the group is *M. woodi*, from Palawan, and, as we know,



Geothlypis trichas

Geothlypis trichas

Geothlypis trichas 1 *Geothlypis trichas* 2 *Geothlypis trichas*

the fauna of this island is, on the whole, Bornean and not Philippine. The most nearly allied genera to *Zosterornis* are *Dasycrotopha*, *Chlorocharis*, and *Cyanoderma*; the two former agree in the shape of the bill and in the structure of the nasal opening, which is a long slit covered by a large membrane. The nasal opening in *Cyanoderma*, though covered over, is differently constructed. All the species of *Zosterornis* have the 5th primary slightly longer than the 4th and 6th; the 1st short, half the length of the 2nd; the tail composed of twelve feathers, the outer pair being somewhat shorter than the middle pair; and a ring of feathers round the eye, which in some species is white and very conspicuous.

I give a key to all the known species of the genus :—

- I. Outer tail-feathers not tipped with white.
 - A. Underparts heavily streaked with black. A ring of white feathers round the eye; upper parts dull olive. Wing 2·4 inches *Z. striatus*.
 - B. Underparts not streaked with black.
 - a. Forehead and sides of head chestnut, rest of crown grey; a ring of white feathers round the eye; upper parts olive; underparts yellowish. Wing 2·5–2·8 inches . . *Z. whiteheadi*.
 - b. Forehead and crown brown, with pale shaft-stripes; upper parts olive-brown, with indistinct pale shafts; throat and chest grey, with white shaft-stripes; rest of underparts white. Wing 2·1 inches . . . *Z. pygmæus*.
 - c. Head, neck, and breast reddish-brown, with white shaft-stripes. Wing 2·2 inches . . . *Z. plateni**
- II. Outer tail-feathers widely tipped with white.
 - C. Forehead and crown mostly chestnut, with pale shafts; cheeks and upper parts olive-grey, with well-marked white shaft-streaks; throat washed with chestnut, rest of underparts whitish. Wing 2·7 inches *Z. capitalis*.

* I have not examined *Zosterornis plateni*, which Dr. Blasius compares with *Z. capitalis* (Tweedd.); it must also be nearly allied to *Z. pygmæus*.

- D. Forehead and crown black; otherwise much like *Z. capitalis*, but the white shaft-stripes on cheeks and back narrower, and the chestnut on throat forming a patch on each side. Wing 2·7 inches *Z. nigrocapitatus*.
- E. Forehead, crown, and throat brilliant golden yellow; otherwise much like *Z. nigrocapitatus*, but the back and underparts washed with yellowish. Wing 2·7 inches *Z. dennistouni*.

<i>Zosterornis striatus</i> .	Province of Isabella and Cape Engaño, North-east Luzon.
„ <i>whiteheadi</i> .	Benguet and Lepanto districts, North-west Luzon.
„ <i>capitalis</i> .	Dinagat, Basilan, and Mindanao.
„ <i>nigrocapitatus</i> .	Samar and Leite.
„ <i>dennistouni</i> .	Cape Engaño, North-east Luzon.
„ <i>pygmæus</i> .	Samar and Leite.
„ <i>plateni</i> .	Mindanao.

32. *HYLOTERPE PHILIPPINENSIS*, Walden; Grant, Ibis, 1895, p. 254.

This Yellow-bellied Thick-head is represented in both collections; it is known to occur in Luzon, Samar, Leite, Siquijor, Mindanao, and Basilan.

It appears to me highly probable that *Hyloterpe mindorensis*, Bourns and Worcester, is synonymous with my *H. albiventris*. If this is so, the latter name has priority. Although the description given of the adult female does not quite agree with the specimens of *H. albiventris* from Mindoro, the discrepancies are comparatively slight.

33. *RHABDORNIS MINOR*, Grant, Bull. B. O. C. no. xl. p. xvii (1896).

Rhabdornis sp., Grant, Ibis, 1896, p. 550.

In my previous paper on the birds of Negros, the opinion was expressed that it would probably be necessary to separate the little Flower-creeper from typical *R. mystacalis*. The present collections include examples of both sexes from Samar as well as Leite, and I find that, besides the difference

in size, the male of the present species invariably has the general colour of the upper parts reddish brown, almost like those of the female. In the male of *R. mystacalis* the upper parts are always dark brownish grey.

[Iris reddish brown ; bill black ; feet dusky.—J. W.]

34. *RHABDORNIS INORNATUS*. (Plate VI. fig. 2.)

Rhabdornis inornatus, Grant, Bull. B. O. C. no. xl. p. xviii (1896).

It is very remarkable that a second species of Flower-creeper should occur in Samar. It is entirely distinct from the *R. mystacalis* type, the top of the head and nape being uniform dark grey, and the bill much shorter and comparatively stout. Only three males were obtained.

[Iris dark ; bill and feet black.—J. W.]

The three species may be distinguished from one another by the following key :—

Key to the Species of Rhabdornis.

- I. Top of the head and nape black, heavily streaked with white ; ear-coverts black.
 - A. Upper parts greyish brown : wing 3·4, culmen 1·1 inch *R. mystacalis*, ♂.
 - B. Upper parts sandy brown : wing 3·0, culmen 0·85 inch *R. minor*, ♂.
- II. Top of the head and nape brown, heavily streaked with white ; ear-coverts brown.
 - C. Upper parts brown : wing 3·2, culmen 1·0 inch. *R. mystacalis*, ♀.
 - D. Upper parts reddish brown : wing 3·0, culmen 0·8 inch *R. minor*, ♀.
- III. Top of the head and nape uniform dark brownish grey ; ear-coverts black : wing 3·35, culmen 0·73 inch *R. inornatus*, ♂.

The female of *R. inornatus* is not known.

35. *DENDROPHILA AENOCHLAMYS*, Sharpe ; Grant, Ibis, 1896, p. 551 ; Bourns & Worcester, Occ. Pap. Minnesota Acad. Sci. i. no. 1, p. 38 (1894).

Sitta aenochlamys, Steere, List Birds & Mamm. Philippines, p. 21 (1890).

The Guimaras Nuthatch was collected on both islands, Leite being a new locality.

[Iris straw-yellow ; orbital skin and bill of a greenish

straw-colour, bill tipped with black; legs olive-green, with edges of scales yellowish. It is a curious fact that the Nuthatch from Palawan and Balâbac should be named *D. frontalis* like the birds from Java and India; while the representative form in Borneo, *D. corallipes*, Sharpe, is a very distinct species, having the underparts almost as bright as those of *D. aenochlamys* and the legs bright vermilion. Mr. A. H. Everett remarks (Ibis, 1895, p. 24) that the Balâbac birds have the legs dull brownish red, instead of brown, as in Palawan specimens. Indian birds have the legs pinkish brown.—J. W.]

36. *ÆTHOPYGA BELLA*, Tweedd. ; Gadow, Cat. B. Brit. Mus. ix. p. 29 (1884).

Although Messrs. Bourns and Worcester do not record this lovely little Sun-bird from Samar, they certainly obtained specimens there, for the Museum has a pair from that island in the Steere Collection which bear Mr. Worcester's label.

Mr. Whitehead also collected several examples, but the species was not met with in Leite, though it doubtless occurs there. "Surigao," where Mr. A. H. Everett obtained the type *Æ. bella*, is in the extreme north-east of Mindanao, but has been confounded in the 'Catalogue of Birds' (*vide supra*) with "Siargao," an island off the coast.

37. *EUDREPANIS PULCHERRIMA* (Sharpe).

Æthopyga pulcherrima, Sharpe; Gadow, Cat. B. Brit. Mus. ix. p. 31 (1884); Steere, List Birds & Mamm. Philippines, p. 22 (1890).

This very beautiful Sun-bird is represented in both collections. Mr. Whitehead has kindly presented to the Natural History Museum a beautiful domed nest of this species found in Samar on the 26th June, together with a pair of birds. These have been mounted by Mr. Cullingford, while the fern (*Angiopteris erecta*) to which the nest is suspended has been skilfully reproduced by Miss Emett. This group is now to be seen in the Bird Gallery. The eggs of this species are rather remarkable, and will be described in a future paper.

38. *CINNYRIS SPERATA* (Linn.); Steere, List Birds & Mamm. Philippines, p. 22 (1890); Bourns & Worcester, Occ. Pap. Minnesota Acad. Sci. i. no. 1, p. 38 (1894); Grant, Ibis, 1896, p. 468.

There are examples of the widely-distributed Red-breasted Philippine Sun-bird in both collections. The species is known to occur in the following islands of the group:—Luzon (south), Marinduque, Mindoro, Tablas, Sibuyan, Masbate, Samar, Leite, Cebu, Siquijor, Negros, Guimaras, Panay, Calamianes, and Palawan.

39. *CINNYRIS JUGULARIS* (Linn.); Grant, Ibis, 1896, p. 551.

The Philippine Yellow-breasted Sun-bird is represented by a male from Leite. It has already been recorded from almost every island in the group.

40. *ARACHNOTHERA PHILIPPINENSIS*.

Philemon philippinensis, Steere, List Birds & Mamm. Philippines, p. 21 (1890).

The Naked-cheeked Spider-hunter is a remarkable form met with in both Samar and Leite, the latter locality being new. Its nearest ally is no doubt *A. chrysogenys*, found in Malacca, Sumatra, Java, and Borneo. In the 'Catalogue of Birds in the British Museum' (ix. p. 101), the key to the species leads one to suppose that the allied species is *A. flaviventris*, but the names *chrysogenys* and *flaviventris* have been transposed. In the Samar bird, the naked parts of the face are much more extended than in *A. chrysogenys*, the forehead, cheeks, ear-coverts, and region of gape being quite naked; the yellow patches on the sides of the throat characteristic of the latter species are absent, and the wings are washed with olive-yellow. In both species, however, the culmen is strongly ridged. Prof. Steere's type is an adult female; we have examples of both sexes, and the plumage is identical.

[Iris and bill black; feet pinkish brown; gape brilliant white, bare skin on face pinkish yellow.—J. W.]

41. ARACHNOTHERA FLAMMIFERA, Tweedd.; Gadow, Cat. B. Brit. Mus. ix. p. 104 (1884); Steere, List Birds & Mamm. Philippines, p. 22 (1890).

Although Dr. Gadow regards the Orange-tufted Spider-hunter as merely a smaller race of *A. longirostris*, the birds appear to me to be perfectly distinct. *A. flammifera* has the cheeks uniform grey, the throat and breast of a much more pronounced grey, this colour extending right over the belly. *A. longirostris* has a well-defined blackish-grey moustachial streak, and the breast and rest of underparts are yellow. The Philippine species has the tufts on the sides of the breast brilliant orange, while in *A. longirostris* they are yellowish orange. In addition to these differences, we may call attention to the much shorter bill of the Philippine bird.

[Iris red-brown; upper mandible black, lower mandible and feet greyish blue.—J. W.]

42. ANTHOTHREPTES GRISEIGULARIS, Tweedd.; Grant, Ibis, 1896, p. 120.

I have the Grey-throated Sun-bird from Samar.

43. ZOSTEROPS BASILANICA, Steere, List Birds & Mamm. Philippines, p. 21 (1890); Grant, Ibis, 1896, p. 552.

The Basilan Silver-eye is represented in both collections. Remarks on this and allied species will be found in my previous paper.

Unlike the allied species (*Z. siquijorensis*) from Negros, this bird is found in the low country from 1000 to 2000 feet.

44. DICEUM RUBRIVENTER, Less.; Grant, Ibis, 1896, p. 120; Steere, List Birds & Mamm. Philippines, p. 22 (1890); Bourns & Worcester, Occ. Pap. Minnesota Acad. Sci. i. no. 1, p. 38 (1894).

The Red-bellied Flower-pecker is in both collections. Leite appears to be a new locality.

45. DICEUM LUZONIENSE, Grant, Ibis, 1895, p. 453.

I have a single adult male from Samar which, if not identical with the Red-breasted Flower-pecker from Luzon, is very closely allied. It appears to differ in the following

points :—The upper parts are slightly washed with steel-blue, the red of the breast appears to be of a rather more orange tint and restricted to the breast, and the wing is decidedly shorter, 1·88 in. against 2·0 to 2·2 in. in typical *D. luzoniense*. Though this bird is altogether smaller and is somewhat different, it is rather injured by shot, and, being unique, I hardly like to separate it on the evidence before me.

46. *DICÆUM PYGMÆUM* (Kittl.) ; Grant, Ibis, 1894, p. 515, 1895, p. 453.

There are examples of the Pigmy Flower-pecker from Leite. The species has been recorded from nearly every island in the group, except Mindanao and the islands to the south.

47. *DICÆUM CINEREIGULARE*, Tweedd. ; Sharpe, Cat. B. Brit. Mus. x. p. 40 (1885) ; Steere, List Birds & Mamm. Philippines, p. 22 (1890) ; Bourns & Worcester, Occ. Pap. Minnesota Acad. Sci. i. no. 1, p. 57 (1894).

The Mindanao Orange-breasted Flower-pecker was met with in both Samar and Leite, and its nests were found on both these islands. Mr. Whitehead has kindly presented the parent birds and one of their small bag-shaped nests suspended from the branch of a tree (*Salacia roxburghi*) to the Natural History Museum. The foliage has been beautifully reproduced by Miss Emett, and the group is now exhibited in the Bird Gallery.

48. *DICÆUM EVERETTI*, Tweedd. ; Sharpe, Cat. B. Brit. Mus. x. p. 47 (1885) ; Steere, List Birds & Mamm. Philippines, p. 22 (1890).

Birds from Samar and Leite are undoubtedly typical examples of Everett's Flower-pecker. Prof. Steere identified his specimens from Samar as doubtfully identical with *D. everetti*, but these were not fully adult.

[Iris light brown ; bill black ; feet dark brown.—J. W.]

49. *PRIONOCHILUS OLIVACEUS*, Tweedd. ; Sharpe, Cat. B. Brit. Mus. x. p. 75 (1885).

Prionochilus samarensis, Steere, List Birds & Mamm. Philippines, p. 22 (1890).

The Olive Thick-billed Flower-pecker seems to be a scarce

bird. I have a male from Leite, and Mr. Whitehead tells me that though two examples were lost in the first collection from Samar, the bird was not seen during his second visit to that island. I cannot quite agree with Prof. Steere in regarding the birds from Samar and Leite as distinct from those found in Dinagat and Basilan; for, even if constant, the differences he points out are extremely slight.

50. *PRIONOCHILUS INEXPECTATUS*, Hartert; Grant, Ibis, 1896, p. 553.

This recently-described species has now been met with in Samar and Leite. It seems more than probable that it is not really distinct from *P. bicolor*, Bourns & Worcester; but, having no typical specimens of the latter form from Mindanao, I cannot be certain.

51. *ARTAMUS LEUCOGASTER* (Wagl.); Grant, Ibis, 1896, p. 554.

There is a specimen of the White-bellied Wood-Swallow from Samar.

52. *SARCOPS CALVUS* (Linn.); Grant, Ibis, 1896, p. 554.

The Bald-headed Grackle is represented in Samar by the black-backed form.

53. *UROLONCHA EVERETTI* (Tweedd.), Grant, Ibis, 1896, p. 555.

Everett's Striped Weaver was obtained in both Samar and Leite.

54. *PITTA ERYTHROGASTRA*, Temm.; Grant, Ibis, 1896, p. 555.

Erythropitta erythrogastra and *E. propinqua* (sic), Steere, List Birds & Mamm. Philippines, p. 17 (1890).

The Red-bellied Pitta has already been recorded from Samar by Steere under the name of *E. propinqua*.

55. *PITTA ATRICAPILLA*, Less.; Grant, Ibis, 1896, p. 555.

This is the first time that the Philippine Black-headed Pitta has been recorded from Samar. Only one female was preserved, and this a breeding bird, its eggs being obtained.

In the adult male all the primaries, including the two outermost, are white, merely tipped with black. In the adult females the white, as a rule, does not extend on to the outer webs of the first two primaries, and in the remaining pairs the black tips are very much wider than in the male; thus the former has a white wing narrowly tipped with black, the latter a black wing with a wide white band across the middle. In young males the wing resembles that of the female. This important sexual difference is not noticed in the British Museum 'Catalogue of Birds' (*cf.* vol. xiv. p. 438). The male is said to have the wing 4.5 in., but the largest male specimen in our now extensive series of this species measures only 4.25 in., and in the great majority of males the wing never exceeds 4.1 in. The wing of the female is generally rather shorter than that of the male. In the Samar bird it measures 3.8 in.

56. *PITTA STEERII* (Sharpe); Sclater, Cat. B. Brit. Mus. xiv. p. 442 (1888); Elliot, Monograph Pittidæ, pl. xxxvii. (1894).

Steere's Ant-Thrush is one of the rarest as well as one of the most beautiful species of the genus. Previously to Mr. Whitehead's visit to Samar the British Museum possessed only four specimens, and two of these were recently acquired with the Steere Collection. The bird was not met with in Leite, nor did there seem to be any ground in the north of this island suitable to its habits. On Samar, however, a good series of specimens was obtained.

The plumage of some of the young birds, being in an interesting stage of transition, is worth describing. The youngest example, a male, has the upper parts and wings like those of the adult, but the breast, sides, and flanks are of a dirty greyish olive, only one or two of the silver-blue feathers being visible, and the entire middle of the breast and belly are pale scarlet. A rather older bird is similar to the above, but down the sides and middle of the breast are three lines of pale blue feathers. In both specimens these are being attained by moult. In the middle of the breast a

tuft of the black adult feathers is making its appearance amongst the red, and some of the latter appear to be turning black without a moult.

A third young male in the British Museum Collection, figured in Mr. D. G. Elliot's Monograph, is incorrectly coloured, for the bird is represented as having the middle of the breast and belly black, edged externally with pale red. This, however, is not the case, the middle of the breast and belly being uniform pale red.

[This beautiful *Pitta* doubtless finds its nearest ally in *Pitta maxima* from Gilolo, which, according to Dr. A. R. Wallace, frequents a hummocky limestone district. It was on ground of this kind that *P. steerii* was met with in Samar. *P. maxima*, although apparently a white-breasted bird, has beautiful green reflections if held in an oblique sunlight. Iris and bill black; feet light brown, pinkish at joint of tarsus.—J. W.]

57. *SARCOPHANOPS SAMARENSIS*, Steere, List Birds & Mamm. Philippines, p. 23 (1890); Bourns & Worcester, Occ. Pap. Minnesota Acad. Sci. i. no. 1, p. 54 (1894).

There are examples of the Samar Broad-bill in both collections, the island of Leite being a new locality.

[*Adult*. Iris brilliant metallic green, with a bronze ring round the pupil; eye-wattle bright Cambridge blue, with darker blue wrinkles; bill greyish slate-blue, whitish on edges; legs Cambridge blue, back of legs darker, nails whitish.

Immature. Iris bright blue, orbital skin lemon-yellow; bill black, white towards the base; feet olive-yellow.—J. W.]

58. *CHÆTURA PICINA*, Tweedd.; Hartert, Cat. B. Brit. Mus. xvi. p. 487 (1892).

Since 1878, when the female type of this rare bird was procured by Mr. A. H. Everett at Zamboanga, the White-throated Spine-tailed Swift had not again been met with till Mr. Whitehead shot three in Leite. Two of these are males and differ in no wise from the female either in plumage or

size. The male type measures—total length 4·3 inches, wing 6·6, tail 1·2.

[Iris dark brown; bill black; legs bare; feet dull lead-grey.—J. W.]

59. *COLLOCALIA TROGLODYTES*, G. R. Gray; Hartert, Cat. B. Brit. Mus. xvi. p. 507 (1892); Bourns & Worcester, Occ. Pap. Minnesota Acad. Sci. i. no. 1, p. 35 (1894).

There is a single male of the White-rumped Swiftlet from Leite. This is the first record of its occurrence in that island, though it is known to occur in Luzon, Mindoro, Marinduque, Sibuyan, Romblon, Masbate, Samar, Mindanao, Siquijor, Cebu, Negros, Guimaras, Panay, and Palawan.

60. *EURYSTOMUS ORIENTALIS* (Linn.); Grant, Ibis, 1896, p. 555.

The Broad-billed Roller is represented in both collections.

61. *MEROPS BICOLOR*, Bodd.; Grant, Ibis, 1895, p. 261.

There is an example of this Bee-eater from Samar.

62. *CEYX SAMARENSIS*, Steere, List Birds & Mamm. Philippines, p. 10 (1890).

Ceyx melanura, Sharpe, Cat. B. Brit. Mus. xvii. p. 180 (1892) [part.].

In spite of what has been said to the contrary, I consider that the Samar Three-toed Kingfisher is distinct from *C. melanura* from Luzon. Not only are the measurements of the wing and bill in the Samar bird considerably longer, but the spots on the wing-coverts are much larger and of a more intense blue. Dr. Sharpe, *l. c.*, considers that *C. platense* is also synonymous with *C. melanura*; but the wing-coverts are very differently coloured, as Dr. Blasius states in his description. *C. platense* is no doubt synonymous with *C. mindanensis* and *C. basilanica*, Steere. The name *C. platense* appears in the April part of the J. f. O. for 1890, while Steere's names, published in his 'List of the Birds & Mammals of the Philippines,' bear the date of "14th July, 1890." It seems, however, pretty certain that Heft ii. of the J. f. O., 1890, though bearing the date of April on the cover, was not

issued till fully six months later, for the copy in the British Museum was not received until the 19th of November, 1890; under these circumstances Prof. Steere's name *Ceyx mindanensis* has priority.

Messrs. Bourus and Worcester have united *C. basilanica*, Steere, with *C. mindanensis*, and state that with a very large series of specimens from Mindanao and Basilan they are unable to detect the slightest difference between the birds from the two islands. We have only the types and the pair of birds from Basilan to judge from, and these certainly appear to belong to different species, for the Basilan birds have *no* trace of black in front of the white spot on the side of the neck, while in Mindanao birds the black is strongly marked. Possibly this character is variable; in *C. dillwynii* it certainly is, for the black in front of the yellowish-white neck-spot is absent or present in birds from the same locality.

Mr. Whitehead did not meet with *C. samarensis* in Leite.

<i>Ceyx melanura</i> (Luzon). in.		<i>Ceyx samarensis</i> (Samar). in.	
6 adults	Culmen 1·4	2 adults	Culmen 1·65-1·7
measure	Wing 2·1	measure	Wing 2·35-2·4
In adults and young alike the spots on the wing-coverts smaller and dull blue.		In adults and young alike the spots on the wing-coverts larger and bright French blue.	

[Iris black; bill and feet vermilion.—J. W.]

63. *ALCYONE FLUMINICOLA* (Steere).

Ceyx fluminicola, Steere, List Birds & Mamm. Philippines, p. 10 (1890); Sharpe, Cat. B. Brit. Mus. xvii. p. 187 (1892).

This species should, in our opinion, be placed with the genus *Alcyone*; for its habits, like those of *A. cyanipectus* and *A. nigrirostris*, are quite different from those of *Ceyx*. The latter are found in the forests far from water, and feed chiefly on insects. The black-billed species of *Alcyone* mentioned above are exclusively met with in the neighbourhood of rivers and streams, and their food consists of fish.

[Iris and bill black; feet coral-red.—J. W.]

64. *HALCYON GULARIS*, Kuhl; Grant, Ibis, 1896, p. 556. The White-throated Kingfisher from Samar.

65. HALCYON CHLORIS (Bodd.) ; Grant, Ibis, 1896, p. 556.

The White-collared Kingfisher from Samar. The ear-coverts are black mixed with green, and united by a black band forming a wide border to the crown.

66. HYDROCORAX SEMIGALEATUS (Tweedd.) ; Grant, Cat. B. Brit. Mus. xvii. p. 360 (1892).

The Greater Samar Hornbill is represented in both collections.

[Iris straw-colour; basal half of bill lake-red, terminal half white; feet dull brick-red.—J. W.]

67. PENELOPIDES SAMARENSIS, Steere ; Grant, Cat. B. Brit. Mus. xvii. p. 376 (1892).

The Lesser Samar Hornbill was obtained in Samar.

68. HARPACTES ARDENS (Temminck) ; Grant, Ibis, 1896, p. 123.

The Philippine Trogon was met with in both islands, Leite being a new locality.

69. IYNGIPICUS LEYTENSIS, Steere ; Grant, Ibis, 1896, p. 472.

Yungipicus leytensis, Steere, List Birds & Mamm. Philippines, p. 9 (1890).

The Leite Pigmy Woodpecker appears to be fairly common in both islands. In the previous paper on the birds of Mindoro, quoted above, a key to the Philippine species of *Iyngipicus* will be found, the present birds coming under sections B and c. The latter would, however, be clearer if it read "ground-colour of underparts pale buff," &c.

70. CHRYSOCOLAPTES RUFOPUNCTATUS, Hargitt, Cat. B. Brit. Mus. xviii. p. 457, pl. xii. (1890) ; Bourns & Worcester, Occ. Pap. Minnesota Acad. Sci. i. no. 1, p. 53 (1894).

Chrysocolaptes samarensis, Steere, List Birds & Mamm. Philippines, p. 8 (1890).

This Crimson-backed Woodpecker is fairly common in Samar, but only one example was obtained in Leite. We have compared Hargitt's female type from Panaon with Steere's types from Samar and fully agree with Messrs. Bourns

and Worcester that the birds belong to the same species. An immature female has the spots on the crown *pale buff*, the ground-colour of the underparts dirty white, and the black stripes on the chin and throat merely indicated.

[Iris red; bill dusky black; feet brownish olive.—J. W.]

71. *MICROSTICTUS FULIGINOSUS*, Tweedd.; Hargitt, Cat. B. Brit. Mus. xviii. p. 492 (1890).

Mülleripicus fuliginosus (Tweedd.) ; Steere, List Birds & Mamm. Philippines, p. 8 (1890).

The Mindanao Black Woodpecker appears to be more plentiful in Leite than it is in Samar, for Mr. Whitehead obtained only one specimen during his stay in the latter island.

Although there are two females of this species in the Steere Collection, this sex does not appear to have been described :—

Adult female. Closely resembles the female of *M. funebris*, but may be distinguished by the general colour of the plumage being greyer; the ground-colour of the chin and throat grey like the cheeks, and the white dots distinctly larger. In the female of *M. funebris* the chin and throat are brownish grey, and contrast with the blackish-grey cheeks.

Total length 10·6 inches, culmen 1·45, wing 5·8, tail 4·1, tarsus 1·1.

72. *THRIPONAX PECTORALIS*, Tweedd.; Hargitt, Cat. B. Brit. Mus. xviii. p. 500, pl. xiii. (1890); Steere, List Birds & Mamm. Philippines, p. 8 (1890); Grant, Ibis, 1896, p. 558.

This Great Black-backed Woodpecker was met with in both islands, its black buff-margined breast-feathers making it easily distinguishable from its allies. In young males, with merely an indication of the malar stripe, the feathers of the breast are black with narrow whitish margins. By referring to the previous paper quoted above, it will be seen that I referred a specimen from Negros to this species which had been included in *T. javensis* by Hargitt. Having gone again over the same ground, I think it is best to follow Hargitt and include Negros birds with *T. javensis*. The fact is that

birds from Negros and Basilan appear to differ from typical *T. javensis* and to approach *T. pectoralis*, having most of the breast-feathers narrowly margined with buff, but on the whole they are much nearer *T. javensis*.

[Iris straw-colour; upper mandible greyish black, lower slaty blue; feet dull slate-blue.—J. W.]

73. *XANTHOLEMA HEMATOCEPHALA* (P. L. S. Müller); Grant, Ibis, 1896, p. 474.

The Crimson-gorgeted Barbet was obtained in both collections, Samar being a new locality.

74. *SURNICULUS VELUTINUS*, Sharpe; Grant, Ibis, 1896, p. 559.

This Little Black Cuckoo was met with in Samar.

75. *EUDYNAMIS MINDANENSIS* (Linn.); Grant, Ibis, 1896, p. 474.

Eudynamis orientalis, Whitehead, Ibis, 1890, p. 409.

The Philippine Koel was found in Leite, where an immature pair were obtained. The female is in an interesting stage of plumage, just beginning to change out of the black into the spotted dress of the adult female.

Capt. Shelley (see Cat. B. Brit. Mus. xix. p. 317) evidently doubts the correctness of Mr. Whitehead's interesting account of the changes in this species (Ibis, 1890, pp. 409-411); but the evidence appears to show conclusively that the first plumage of the immature female is black, like that of the male adult.

76. *CENTROPUS VIRIDIS* (Scop.); Grant, Ibis, 1895, p. 466.

A male was collected at Samar. The name of this species was accidentally omitted from our last paper on the birds of Negros.

77. *CENTROPUS MELANOPS*, Less.; Shelley, Cat. B. Brit. Mus. xix. p. 365 (1891).

Pyrrhocentor melanops, Steere, List Birds & Mamm. Philippines, p. 12 (1890).

The Black-masked Coucal is an extremely handsome Cuckoo, and represented in both collections. This species

has now been found in Samar, Leite, Nipah, Mindanao, and Basilan.

[Iris lake-red ; bill and feet black.—J. W.]

78. *CACATUA HÆMATUROPYGIA* (P. L. S. Müll.) ; Grant, Ibis, 1896, p. 560.

A specimen of the Philippine Cockatoo from Samar.

79. *PRIONITURUS DISCURUS* (Vieill.) ; Grant, Ibis, 1896, p. 560.

Samar and Leite specimens of the Philippine Racquet-tailed Parrot resemble the more northern forms in having the blue crown paler, less extended, and shading into the yellow-green forehead and nape.

80. *TANYGNATHUS LUCONENSIS* (Linn.) ; Grant, Ibis, 1896, p. 561.

The various insular forms of this species have already been discussed in my previous paper quoted above. Though the Blue-crowned Parraquet is represented in both collections, neither of the birds is fully adult, but they appear to be most like birds from Cebu.

It is the first time that this species has been recorded from Samar and Leite.

[Iris straw-white, a ring of brown round the pupil ; bill rosy red, lower mandible pale pinkish red ; feet olive-brown.—J. W.]

81. *BOLBOPSITTACUS INTERMEDIUS*, Salvad. Cat. B. Brit. Mus. xx. p. 505, pl. xiii. (1891) ; Bourns & Worcester, Occ. Pap. Minnesota Acad. Sci. i. no. 1, pp. 36 & 50 (1894).

Mr. Whitehead obtained a good series of the Samar Collared Parraquet in both islands, Leite being a new locality. The type specimen, a male, has the blue parts of the face inclining to purplish and rather more richly coloured than in any of the specimens now before me ; still there can be no doubt that the Samar and Leite birds belong to this species, which is very close to *B. lunulatus*, but the latter has the collar and face of a verditer-blue.

82. *LORICULUS WORCESTERI*, Steere, List Birds & Mamm. Philippines, p. 6 (1890); Bourns & Worcester, Occ. Pap. Minnesota Acad. Sci. i. no. 1, p. 50 (1894).

With a good series of the Samar Lorikeet before me, I agree with Messrs. Bourns and Worcester that this species is distinct from *L. apicalis*, with which it was united by Count Salvadori. The distinctive characters were correctly given in Prof. Steere's original description.

83. *OSMOTRERON AXILLARIS* (G. R. Gray, MS., *fide* Bonap.); Grant, Ibis, 1896, p. 553.

A female of the Philippine Green Pigeon was collected at Samar for the first time.

84. *PTILOPUS OCCIPITALIS*, G. R. Gray; Grant, Ibis, 1896, p. 564.

A male of the Yellow-breasted Fruit-Pigeon from Samar.

85. *PTILOPUS LECLANCHERI* (Bonap.); Grant, Ibis, 1896, p. 124.

The Black-throated Fruit-Pigeon is recorded from Samar for the first time.

86. *PHABOTRERON AMETHYSTINA* (Bonap.); Salvad. Cat. B. Brit. Mus. xxi. p. 66 (1893); Grant, Ibis, 1896, p. 563.

The Amethyst Brown Pigeon belongs to the large-billed group, which has been already discussed in our paper quoted above. Several examples from Samar.

[Iris light brown; bill black; bare skin round eye dull greenish white; feet coral-pink.—J. W.]

87. *PHABOTRERON BREVIROSTRIS*, Tweedd.; Salvad. Cat. B. Brit. Mus. xxi. p. 69 (1893); Grant, Ibis, 1896, p. 563.

This Brown Pigeon belongs to the small-billed group mentioned in the previous paper. It was obtained in both islands.

88. *CARPOPHAGA CHALYBURA*, Bonap.; Grant, Ibis, 1896, p. 564.

Bonaparte's Philippine Fruit-Pigeon is represented in both collections.

89. *CARPOPHAGA POLIOCEPHALA*, G. R. Gray ; Grant, Ibis, 1896, p. 564.

This splendid Green Fruit-Pigeon has been sent from both islands. This is the first time it has been recorded from Leite.

90. *MACROPYGIA TENUIROSTRIS*, G. R. Gray ; Grant, Ibis, 1896, p. 565.

A male of the Slender-billed Cuckoo-Dove from Leite ; the first recorded from that island.

91. *TURTUR DUSSUMIERI* (Temm.) ; Grant, Ibis, 1895, p. 471.

A specimen of Dussumier's Turtle-Dove from Samar, which is a new locality, though Mr. A. H. Everett met with it in South Leite.

92. *PHLOGENAS CRINIGERA* (Reichenb.) ; Salvad. Cat. B. Brit. Mus. xxi. p. 587 (1893) ; Bourns & Worcester, Occ. Pap. Minnesota Acad. Sci. i. no. 1, p. 30 (1894).

The Mindanao Blood-breasted Ground-Pigeon was obtained in Leite. It had previously been recorded from Basilan, Mindanao, and Samar. Sulu Island ?

[Iris dull violet-blue ; bill dull grey, darker at tip ; legs pale pink, with deep lake scales.—J. W.]

93. *GORSACHIUS MELANOLOPHUS* (Raffl.) ; Steere, List Birds & Mamm. Philippines, p. 27 (1890) ; Bourns & Worcester, Occ. Pap. Minnesota Acad. Sci. i. no. 1, p. 32 (1894).

An immature specimen of the Malayan Tiger-Bittern from Samar completes the list.

XIX.—*Description of a new Bird of Paradise from British New Guinea.* By C. W. DE VIS.

(Plate VII.)

THE bird, of which I forward a specimen, appears to belong to a new genus of *Paradiseidæ*, which I propose to name (by request), after Lady Macgregor :—